

# 3325 Wilshire Building

LOS ANGELES, CALIFORNIA



architectural achievements

A.I.A. FILE NO. 17-A • 1956  
3325 WILSHIRE BUILDING  
wall system

ALCOA  
ALCOA SERIES  
100-22



## Building Data

BUILDING: 3325 Wilshire Building, Los Angeles, Calif.

OWNER AND BUILDER: Tishman Realty & Construction Co., New York and Los Angeles

ARCHITECT: Victor Gruen & Associates, Los Angeles, Calif.

GENERAL CONTRACTOR: C. L. Peck, Los Angeles, Calif.

ALUMINUM SUBCONTRACTOR:  
The Kawneer Company, Niles, Mich.

BUILDING USE: Office building

HEIGHT: 13 stories

DIMENSIONS AT BASE: 155 x 352

GROSS FLOOR AREA: 232,646 square feet

USABLE FLOOR AREA: 203,159 square feet

AIR CONDITIONING: 100%

EXTERIOR WALL AREA (approximate):

Aluminum—62,000 square feet (includes louvers)

Glass— 51,000 square feet (includes all types of glass)

Plaster— 12,600 square feet

WEIGHT OF WALL:

5.25 pounds per square foot—east and west walls

18.25 pounds per square foot—north and south walls

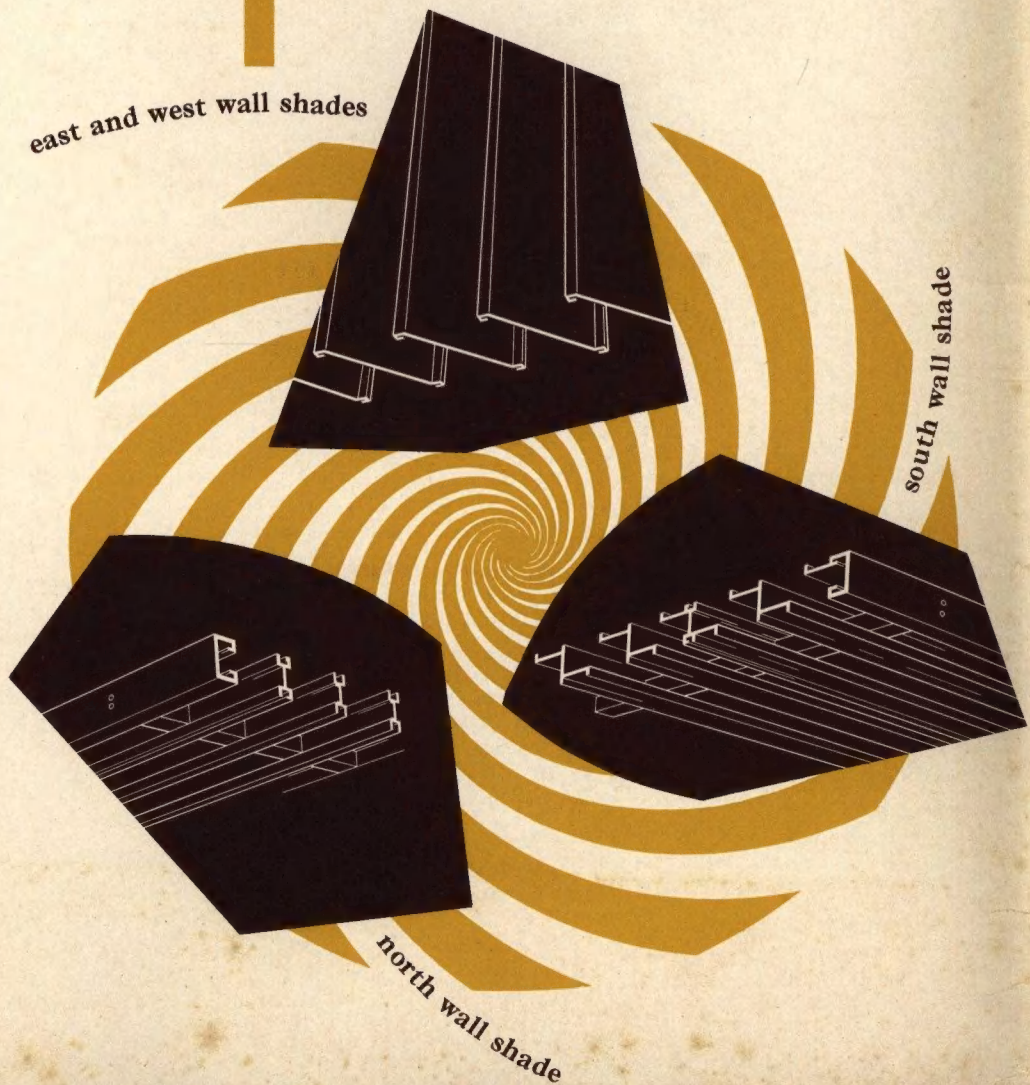
TYPE OF WINDOWS: Fixed tubular aluminum



east and west wall shades

south wall shade

north wall shade







## A THIRD DIMENSION IN CURTAIN WALLS

A most exciting trend in contemporary architecture has been the recent effort by some architects to create aluminum curtain wall facades that have *visual depth*. Instead of a single flat plane, such walls are comprised of many opposing planes that aesthetically exploit the changing effects of sunlight and shadow. Although this device of architectural design is centuries old, it has been employed but little on aluminum wall systems, despite the fabricating versatility and present economy of Alcoa Aluminum.

One such type of "third-dimensional" aluminum curtain wall, which is particularly handsome as well as highly functional, is that designed by Victor Gruen and Associates for the new 3325 Wilshire Building in Los Angeles. Its wall is comprised of a thin skin (mostly glass) in front of which are either vertical or horizontal sunshades of Alcoa Aluminum. These not only supply a striking appearance of depth, but also filter out the excessive sunlight and unwanted heat of this Southern California locale.

## WALL COMPONENTS

The innermost part of the "two layer" wall is made of several types of glass set in simple tubular aluminum frames. The latter had been factory assembled and were easily installed in convenient units—six men finishing one floor per day. The sunshade elements of the wall were likewise planned as large prefabricated pieces, their installation being but the final assembly step on the production line.

Horizontal "eyebrow" type shades were applied on the north and south walls, with designs varying to meet the particular light conditions of each location. Vertical louvers were used on the east and west walls and were set at an angle which cuts off the low glaring sun, but permits the entrance of north light. These louvers are held several feet away from

the building skin by outriggers. In this way most of the heat rays are turned back before they reach the glass area. Kawneer Company, aluminum fabricator for the project, engineered, built and tested ten full-scale mockups of various vertical louver designs before selecting the shape most appropriate for light and heat reflectance, wind loading, flutter, finish, etc.

## SAVINGS WITH ALCOA ALUMINUM

Through the use of aluminum sunshades on all sides of the Wilshire structure, the air-conditioning load on the building was estimated by the architect to have been *reduced about 15%*.

Since the building was completely air-conditioned and a safe window washing track was provided outside, *fixed aluminum sash* was found practical and produced still another economy.

In addition to these savings, the light weight of exterior walls plus development of a welded rigid building frame (for earthquake resistance) cut the weight of structural steel by 3 to 4 pounds per square foot, or an estimated *350 tons altogether*.

When buildings are designed from the ground up to take advantage of aluminum's characteristics, and when the experience of architect, engineer, fabricator and Aluminum Company of America is carefully coordinated as it was on this job—*over-all building economies result*.

Tishman Realty and Construction Company has apparently found this to be true. For 3325 Wilshire Building is the third great structure which this owner-builder has erected using Alcoa Aluminum.\* And still another building, almost identical to this one, is being built a few blocks away.

*\*Other buildings were in New York City—99 Park Avenue (Architectural Achievements 100-1) completely clad with aluminum in one week; and 460 Park Avenue, completely clad in one day.*



# Aluminum Fabricators

## KAWNEER COMPANY

Niles, Michigan

*Aluminum Subcontractor—3325 Wilshire Building*

Since its formation in 1906 as a manufacturer of resilient metal store-front sash, Kawneer Company has contributed steadily to the growing use of aluminum in architecture. The firm has grown, too, until today it is one of the leaders in this field, specializing in a broad line of store-front products—sash, entrance doors and frames, fascia, trim and sun control items. In addition, the Metal Wall Division engineers, fabricates, color finishes and installs aluminum curtain walls along with several types of windows for both metal and conventional walls.

The Company feels that its large engineering staff, plus 50 years of experience in architectural metals, has helped save uncounted hours in valuable detailing time for architects. Once a basic wall design has been established, Kawneer takes it and completely engineers every metal element in the wall. In producing these elements, as much preassembly as practical is used to minimize field work during erection.

The firm's main plant and offices are in Niles, Michigan with other plants strategically located at Berkeley, California, Lexington, Kentucky and Toronto, Canada.

## KAWNEER ALUMINUM WALL SYSTEM INSTALLATIONS

Equitable Life Building, San Francisco, California

Architect: Loubet & Glynn

Pacific Mutual Building, San Francisco, California

Architect: Loubet & Glynn—Successors to W. D. Peugh (Deceased)

Niles High School, Niles, Michigan

Architect: Eberle M. Smith Associates, Inc.

Reynolds Building, San Francisco, California

Architect: Loubet & Glynn

Sousa Building, Oakland, California

Architect: John B. Anthony

Newark Center Building, Newark, New Jersey

Architect: William E. Lehman and Steinhart & Thompson

Geigy Chemical Building, Greenburgh, New York

Architect: Skidmore, Owings & Merrill

3325 Wilshire Building, Los Angeles, California

Architect: Victor Gruen & Associates

3540 Wilshire Building, Los Angeles, California

Architect: Victor Gruen & Associates

Kaiser Building, Ravenswood, West Virginia

Architect: Kaiser Aluminum & Chemical Company Engineers

Consumers Power, Jackson, Michigan

Architect: Lee Black & Kenneth C. Black

Fireman's Fund Insurance Building, San Francisco, California

Architect: Edward B. Page

Mutual Benefit Insurance Co., Newark, New Jersey

Architect: Frank Grad and Sons,  
Eggers and Higgins Associates

# Alcoa Sales Offices

ABERDEEN, S. D.	304 Western Union Building
AKRON 8, OHIO	506 Akron Savings & Loan Building
ALBANY 7, N. Y.	90 State Street
ALLENTOWN, PA.	1132 Hamilton Street
ATLANTA 3, GA.	1800 Rhodes-Haverly Building
BALTIMORE 1, MD.	400 Baltimore Life Building
BIRMINGHAM 3, ALA.	720 North 19th Street
BOSTON 16, MASS.	20 Providence Street, Park Square
BRIDGEPORT 4, CONN.	Atlantic Street
BUFFALO 7, N. Y.	1880 Elmwood Avenue
CHARLOTTE 2, N. C.	616 Johnston Building
CHATTANOOGA 2, TENN.	1205 Volunteer Building
CHICAGO 11, ILL.	520 North Michigan Avenue
CINCINNATI 6, OHIO	2331 Victory Parkway
CLEVELAND 13, OHIO	1450 Terminal Tower
COLUMBUS 15, OHIO	40 South Third Street Building
DALLAS 2, TEXAS	301 Thomas Building
DAVENPORT, IOWA	503 Kahl Building
DAYTON 5, OHIO	207 Northtown Arcade
DENVER 6, COLO.	105 Fillmore Street
DETROIT 2, MICH.	610 New Center Building
EVANSVILLE 8, IND.	207 Kinkel Building
FORT WAYNE, IND.	930 Lincoln Bank Tower
GRAND RAPIDS 2, MICH.	812 Michigan National Bank Building
HARTFORD 3, CONN.	Capitol Building, 410 Asylum Street
HOUSTON 2, TEXAS	1804 Commerce Building
INDIANAPOLIS 8, IND.	2939 North Meridian Street
JACKSON, MICH.	1405 National Bank Building
KANSAS CITY 5, MO.	2300 Power & Light Building
LOS ANGELES 17, CALIF.	1145 Wilshire Boulevard
LOUISVILLE 2, KY.	1154 Starks Building
MEMPHIS 3, TENN.	1520 Sterick Building
MIAMI 32, FLA.	1605 Alfred I. du Pont Building
MILWAUKEE 2, WIS.	735 North Water Street
MINNEAPOLIS 2, MINN.	1060 Northwestern Bank Building
NEWARK 2, N. J.	744 Broad Street
NEW ORLEANS 12, LA.	627 Whitney Building
NEW YORK 17, N. Y.	230 Park Avenue
OKLAHOMA CITY 2, OKLA.	111 N.W. 23rd Street
OMAHA 2, NEB.	746 Omaha National Bank Building
PEORIA, ILL.	725 Commercial Bank Building
PHILADELPHIA 9, PA.	123 South Broad Street
PITTSBURGH 19, PA.	1501 Alcoa Building
PONTIAC 15, MICH.	301 Pontiac State Bank Building
PORTLAND 4, ORE.	1115 U. S. National Bank Building
PROVIDENCE 3, R. I.	2503 Industrial Bank Building
RICHMOND 19, VA.	712 Southern States Building
ROCHESTER 4, N. Y.	1124 Lincoln Alliance Bank Building
ST. LOUIS 8, MO.	10th Floor, Continental Building
SAN FRANCISCO 4, CALIF.	2509 Equitable Life Building
SEATTLE 1, WASH.	1411 Fourth Avenue Building
SOUTH BEND 1, IND.	805 J.M.S. Building
SPOKANE 1, WASH.	610 Fidelity Building
SPRINGFIELD 3, MASS.	508 Tarbell-Walters Building
SYRACUSE 3, N. Y.	731 James Street
TAMPA 2, FLA.	227 First National Bank Building
TOLEDO 4, OHIO	1801 Owens-Illinois Building
WASHINGTON 6, D. C.	1200 Ring Building
WICHITA 2, KAN.	1011 Central Building
WILMINGTON 1, DEL.	1402 Delaware Trust Building
WORCESTER 8, MASS.	22 Pleasant Street
YORK, PA.	205 Manufacturers Building
YOUNGSTOWN, OHIO	537 Ohio Edison Building
EXPORT DIVISION	230 Park Avenue, New York 17, N. Y.



1894 ALCOA BUILDING • PITTSBURGH 19, PA.



# architectural achievements

ALCOA SERIES 100-22

## ALUMINUM WORK—3325 WILSHIRE BUILDING, LOS ANGELES, CALIFORNIA

ARCHITECT.....VICTOR GRUEN & ASSOCIATES

OWNER-BUILDER.....TISHMAN REALTY & CONSTRUCTION CO., INC.

SUBCONTRACTOR.....THE KAWNEER COMPANY

### Suggested Outline Specifications

To facilitate bidding and accurate quoting it is recommended that the aluminum components, including anchorage and accessories, be treated under a separate specification division and not combined with miscellaneous metalwork or any other division of work.

#### 1. GENERAL CONDITIONS

- A. The General Conditions of the Contract for the Construction of Buildings, standard form of the American Institute of Architects and the Supplementary General Conditions are part of this contract.

#### 2. SCOPE

- A. Furnish material and all services necessary to complete the fabrication and delivery of aluminum window wall system as indicated on the drawings.

#### 3. MATERIALS—Aluminum shall be composed of Alcoa Aluminum Alloys.

##### East and West Walls (Drawing 1)

- A. Panel components shall be shop assembled. Panel sill, head and edges, window sill, head and horizontal mullion tubes—Alcoa Anoclad Extrusion Type 10.
- B. Vertical louvers—Alcoa Anoclad Sheet Type 10.
- C. Outrigger cover and fascia—Alcoa Anoclad Extrusion Type 10.
- D. Coping—Alcoa Anoclad Extrusion Type 10.
- E. Outrigger, clip angles and rods—steel, galvanized.
- F. Exposed fasteners—2024 alloy aluminum or stainless steel.
- G. Unexposed fasteners—2024 alloy aluminum or galvanized steel.

##### North and South Walls (Drawing 2)

- A. Louver blades, types N and S, and outrigger cover—Alcoa Anoclad Sheet Type 10.
- B. Louver fascia—Alcoa Anoclad Extrusion Type 10.
- C. Window shapes: sill, head and mullions—Alcoa Anoclad Extrusion Type 10.
- D. Spandrel closures and plaster stops—Alcoa Anoclad Sheet Type 10.
- E. Coping—Alcoa Anoclad Sheet Type 10.
- F. Outrigger, clip angles and straps—steel, galvanized.
- G. Exposed fasteners—2024 alloy aluminum or stainless steel.
- H. Unexposed fasteners—2024 alloy aluminum or galvanized steel.

#### 4. FINISHES—Colors shall be in accordance with standards established by the Aluminum Company of America.

- A. Panel components, louvers, fascias, outrigger covers, closures and coping—Alcoa Architectural Gray 2010.
- B. Window—Alcoa Architectural Gray 2010 (for ease of maintenance)

#### 5. DISSIMILAR MATERIALS

- A. All steel to come in contact with aluminum—a coat of heavy-bodied bituminous paint.

#### 6. TEMPORARY PROTECTION

- A. All exposed aluminum surfaces shall be protected against stain during construction by two coats of an approved water-white methacrylate lacquer having a minimum thickness of .0006" for both coats.

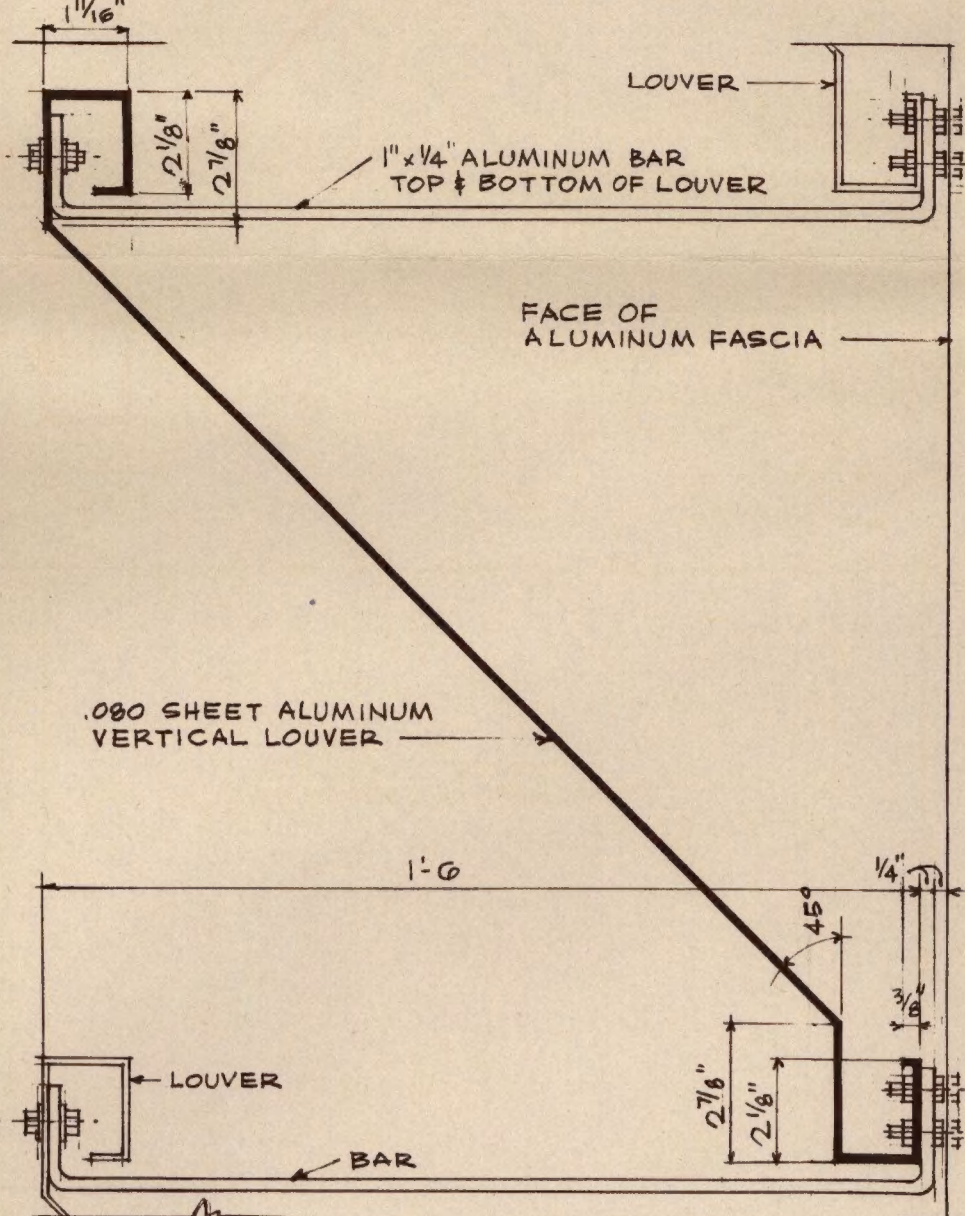
#### 7. ERECTION

- A. Wall system components, louvers and erection angles shall be accurately located to line and elevation and shall be plumb. Allowed tolerance shall be in accordance with the Code of Standard Practice of the A.I.S.C.

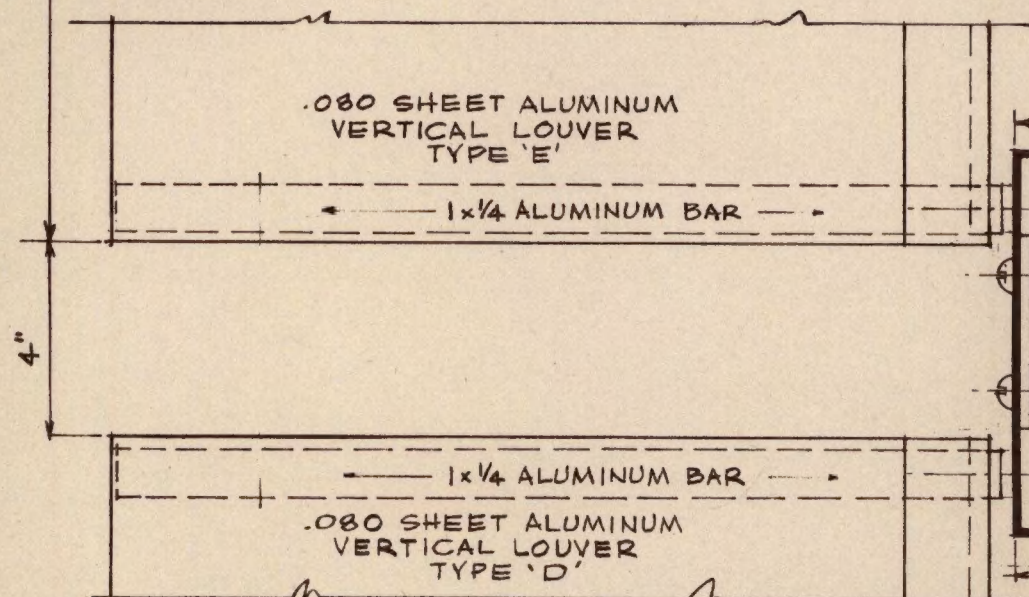
**ALCOA**   
**ALUMINUM**  
ALUMINUM COMPANY OF AMERICA



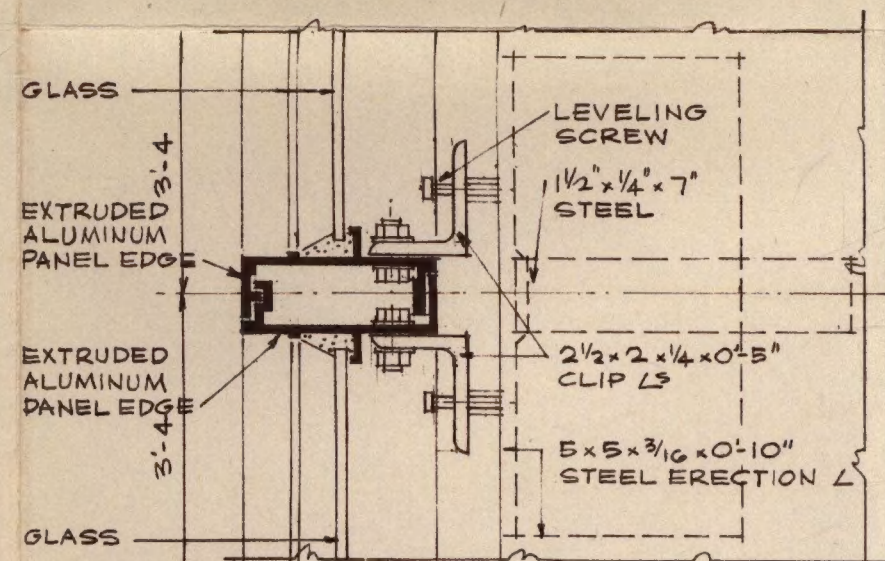
11'-5" (HEIGHT OF TYPICAL VERTICAL LOUVER) 11'-5"



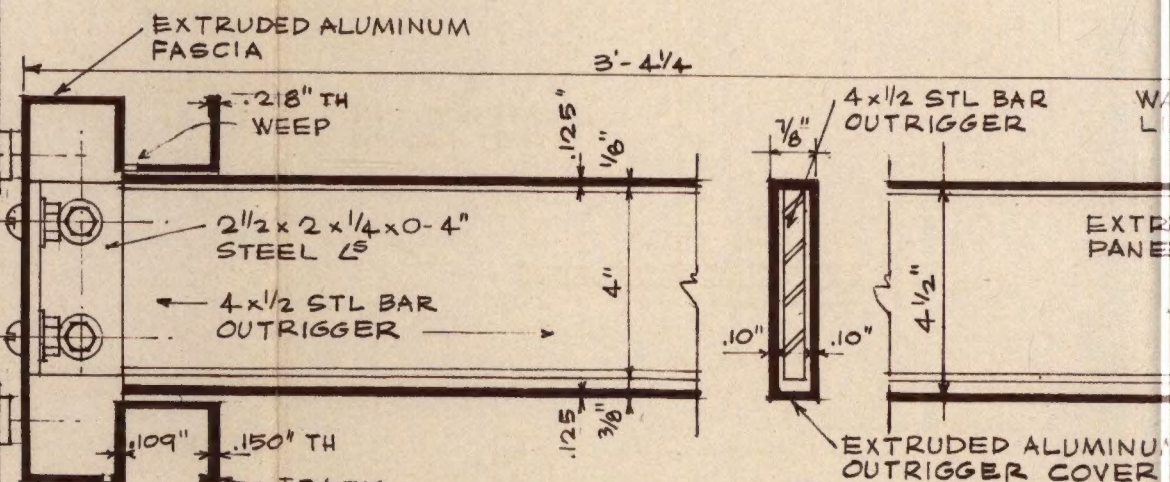
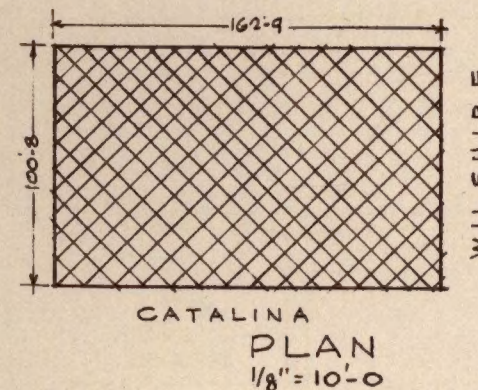
SECTION E



CATALINA ST. ELEVATION  
1/32" = 1'-0"  
(WEST)



SECTION D



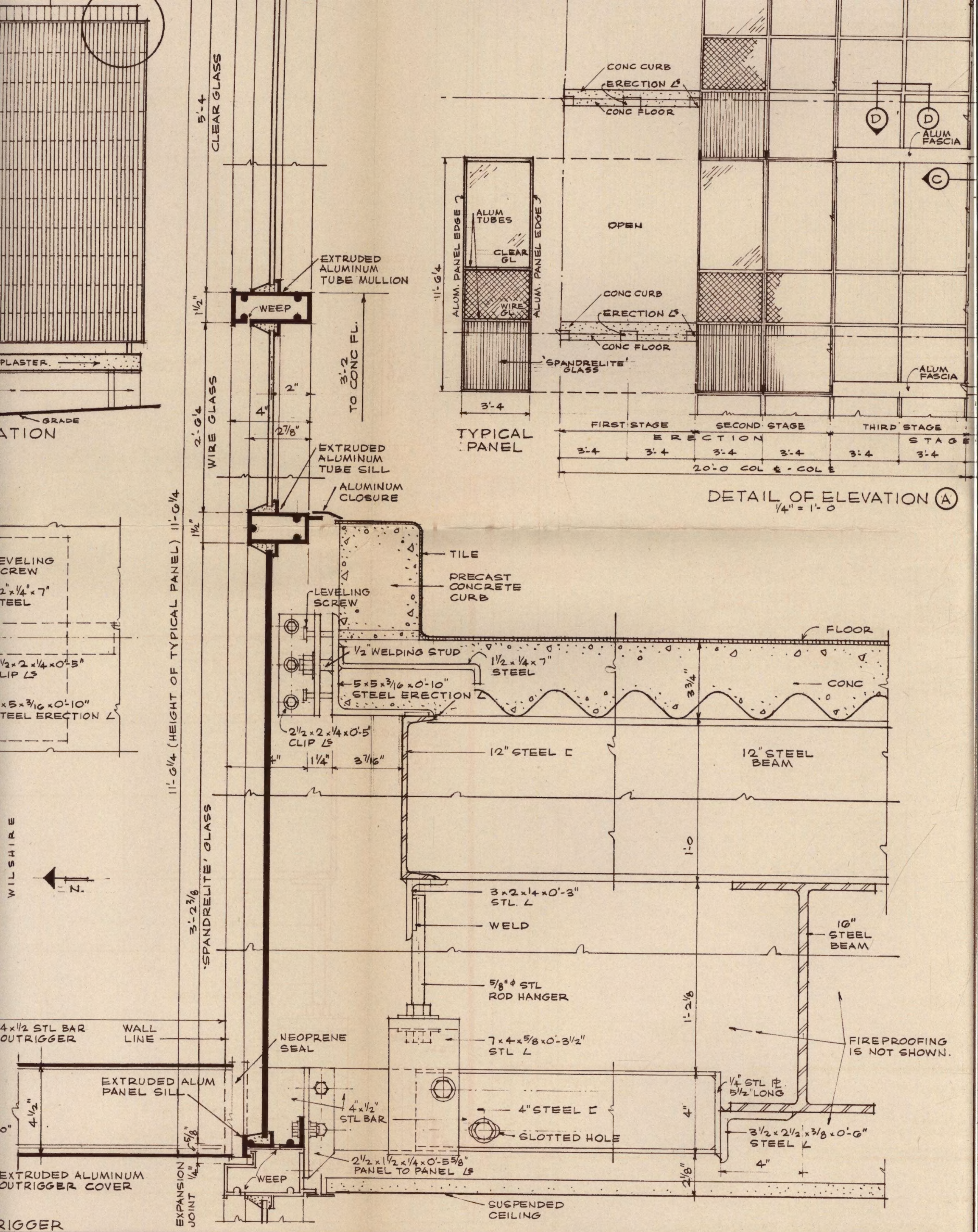
SECTION C  
SECTION THRU OUTRIGGER

COMPLETED  
MAY 1956

PROJECT  
ARCHITECT  
OWNER-BUILDER  
SUBCONTRACTOR, ALUMINUM

3325 WILSHIRE BUILDING  
VICTOR GRUEN & ASSOCIATES.  
TISHMAN REALTY & CONST. CO.  
THE KAWNEER CO.



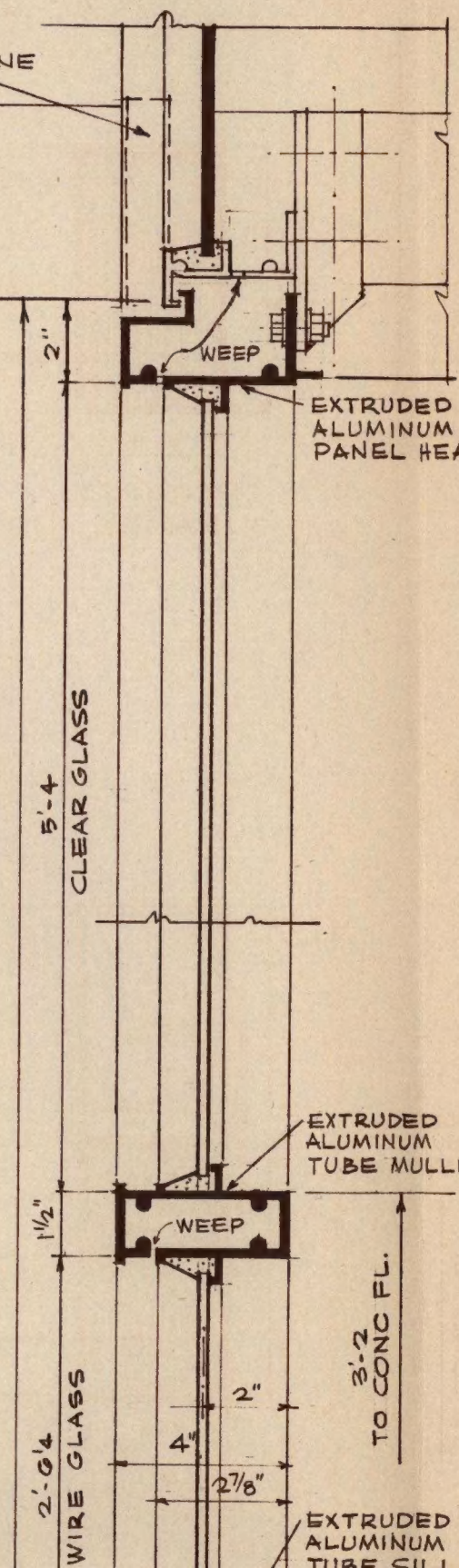
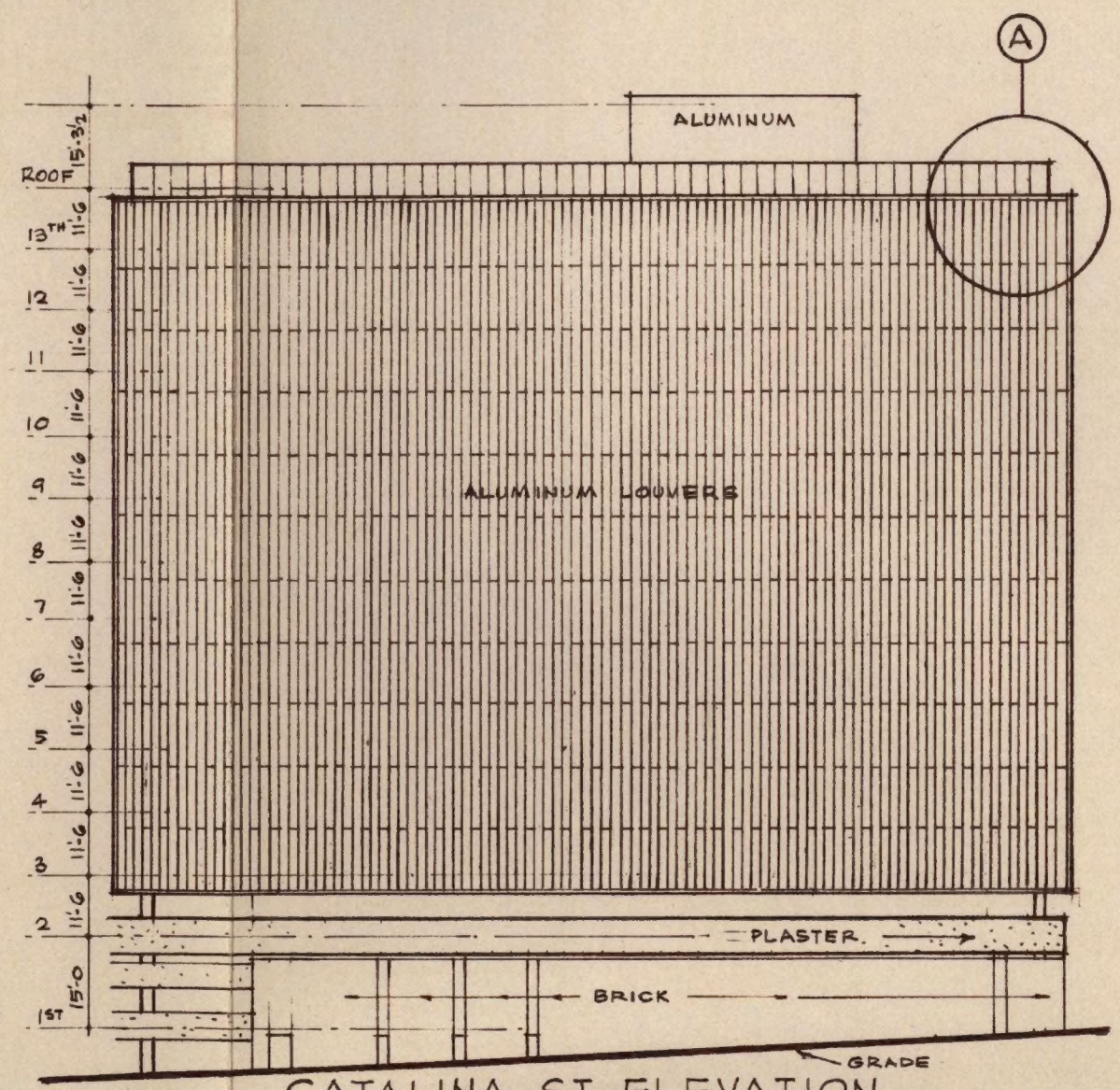
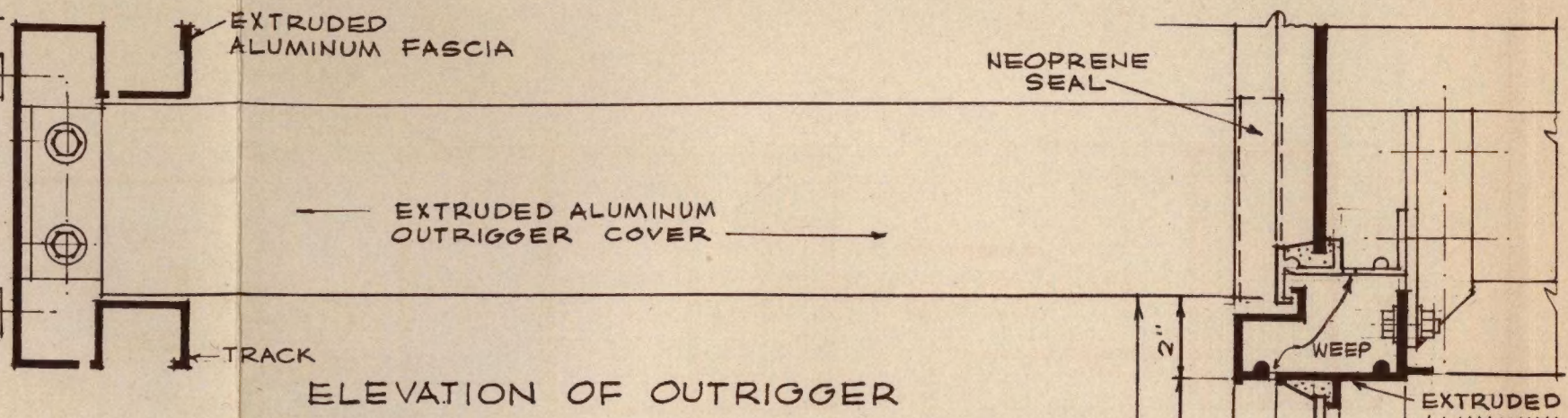
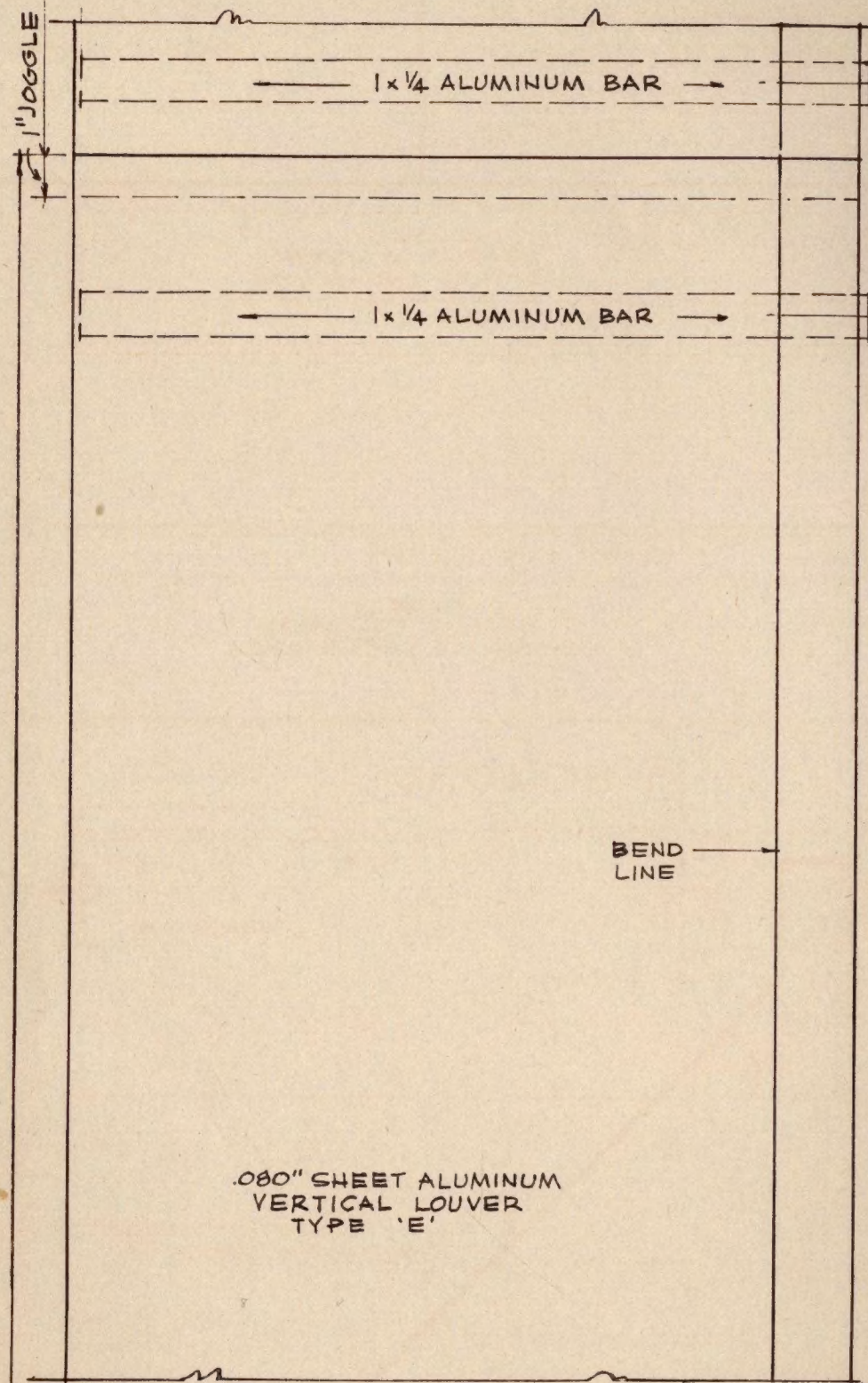


BUILDING  
ASSOCIATES.  
# CONST. CO. INC.  
D.

LOS ANGELES, CALIF.  
LOS ANGELES, CALIF.  
LOS ANGELES, CALIF.  
NILES, MICHIGAN

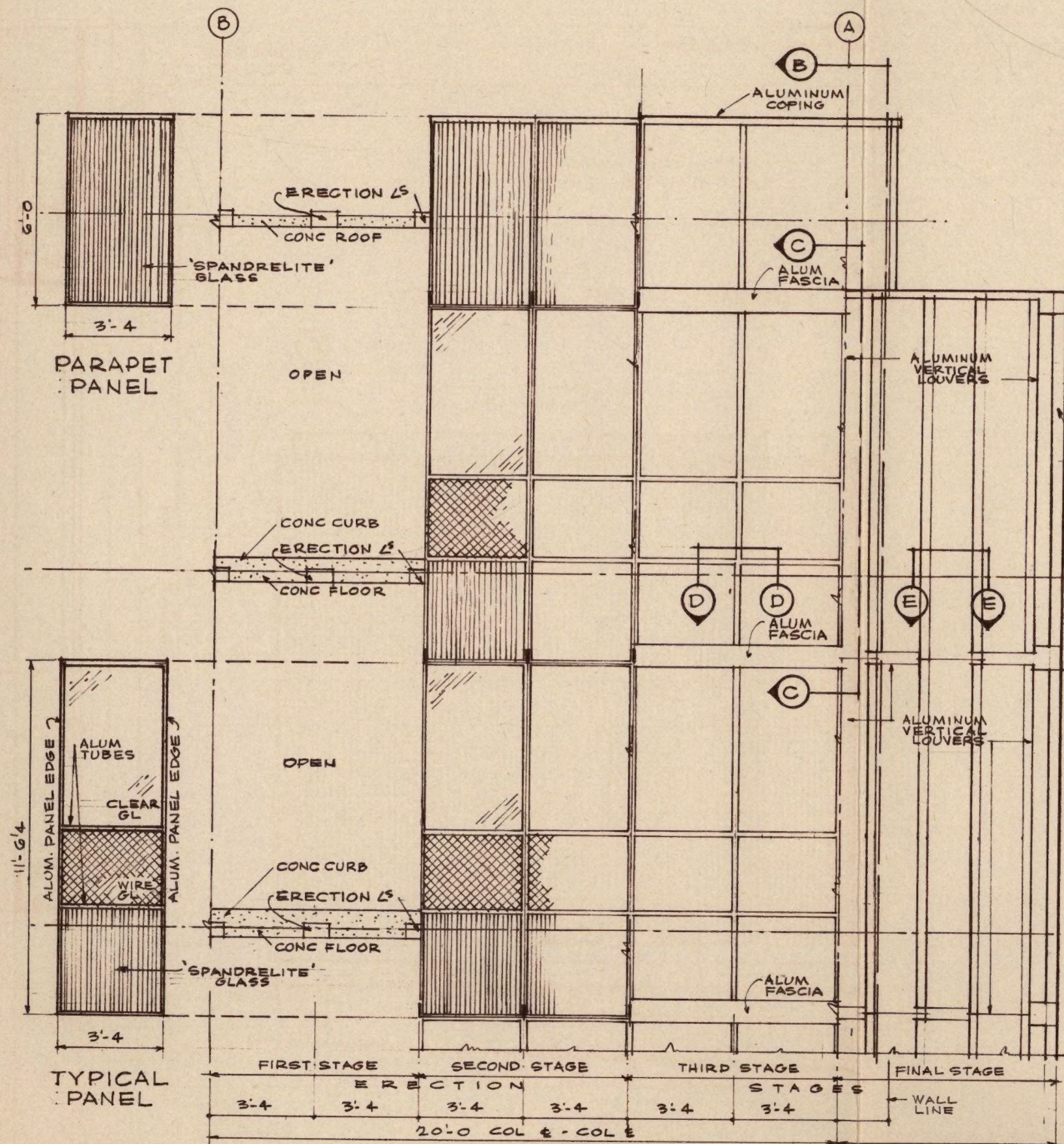
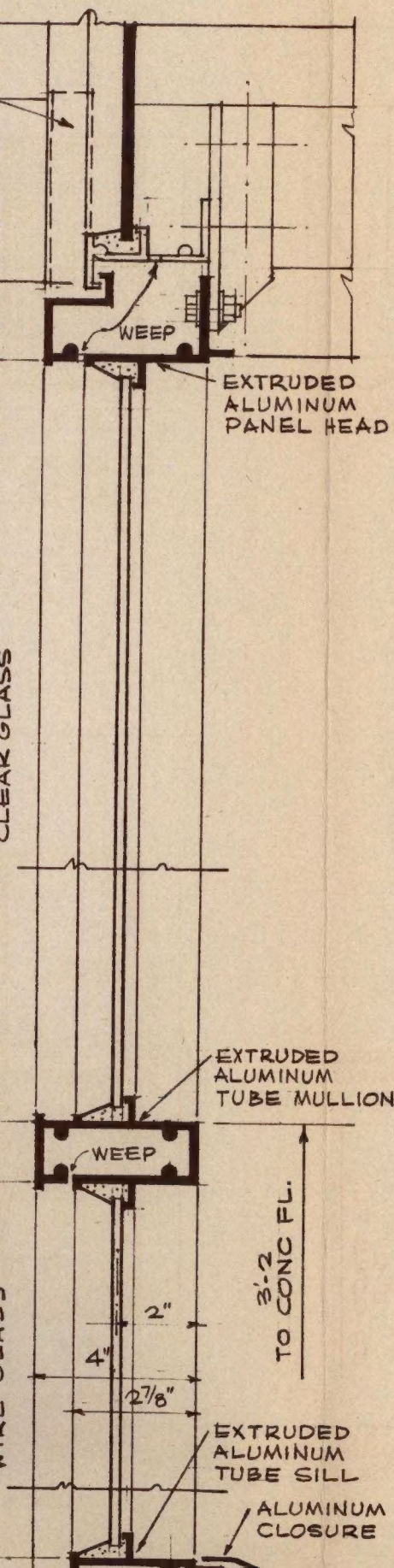
This drawing and suggested outline specifications are submitted for general information only and should not be used except upon the independent advice of competent persons. They do not constitute or contain a warranty of fitness for any particular purpose, of freedom from infringement of any patent or patents, or any other warranty. No responsibility or liability on account of them or for any error in them is assumed by or shall attach or be attributed to Aluminum Company of America or any architect, general contractor, fabricator or other person named herein.



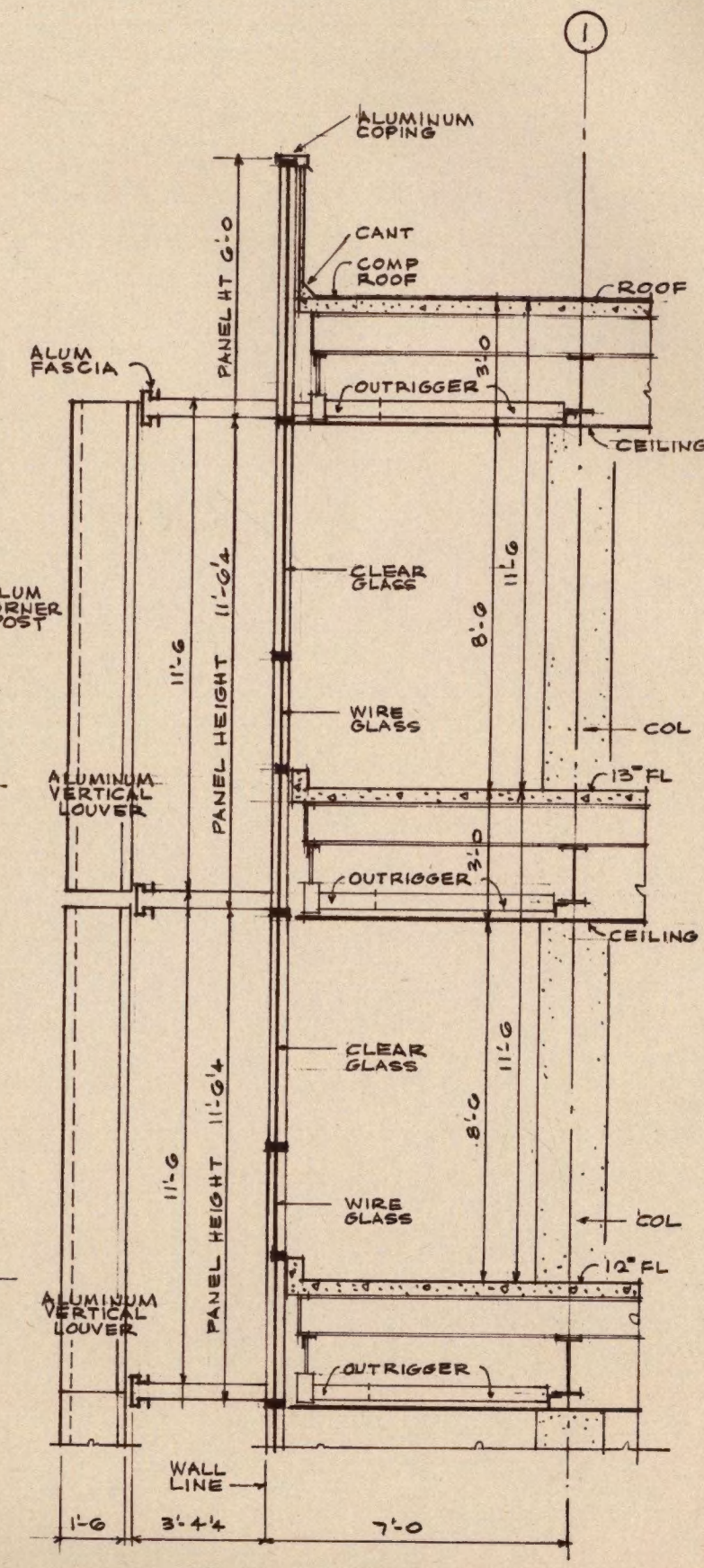


CATALINA ST. ELEVATION  
1/32" = 1'-0"  
(WEST)



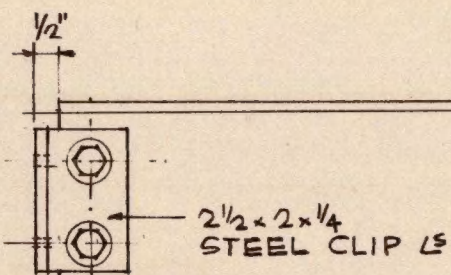


DETAIL OF ELEVATION (A)  
1/4" = 1'-0"



SECTION (B)  
1/4" = 1'-0"



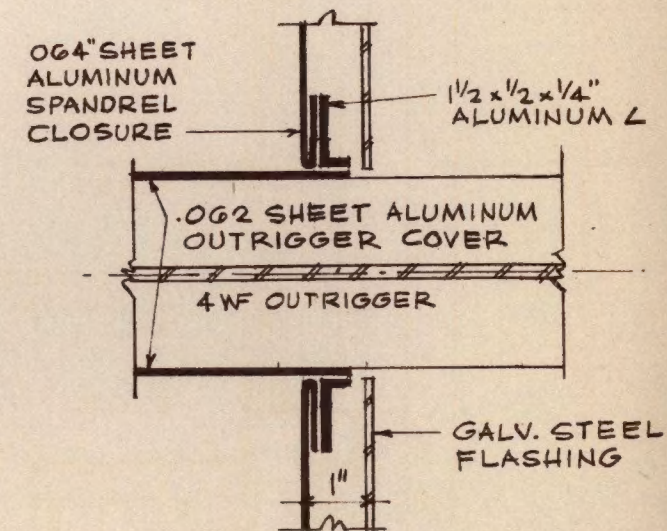
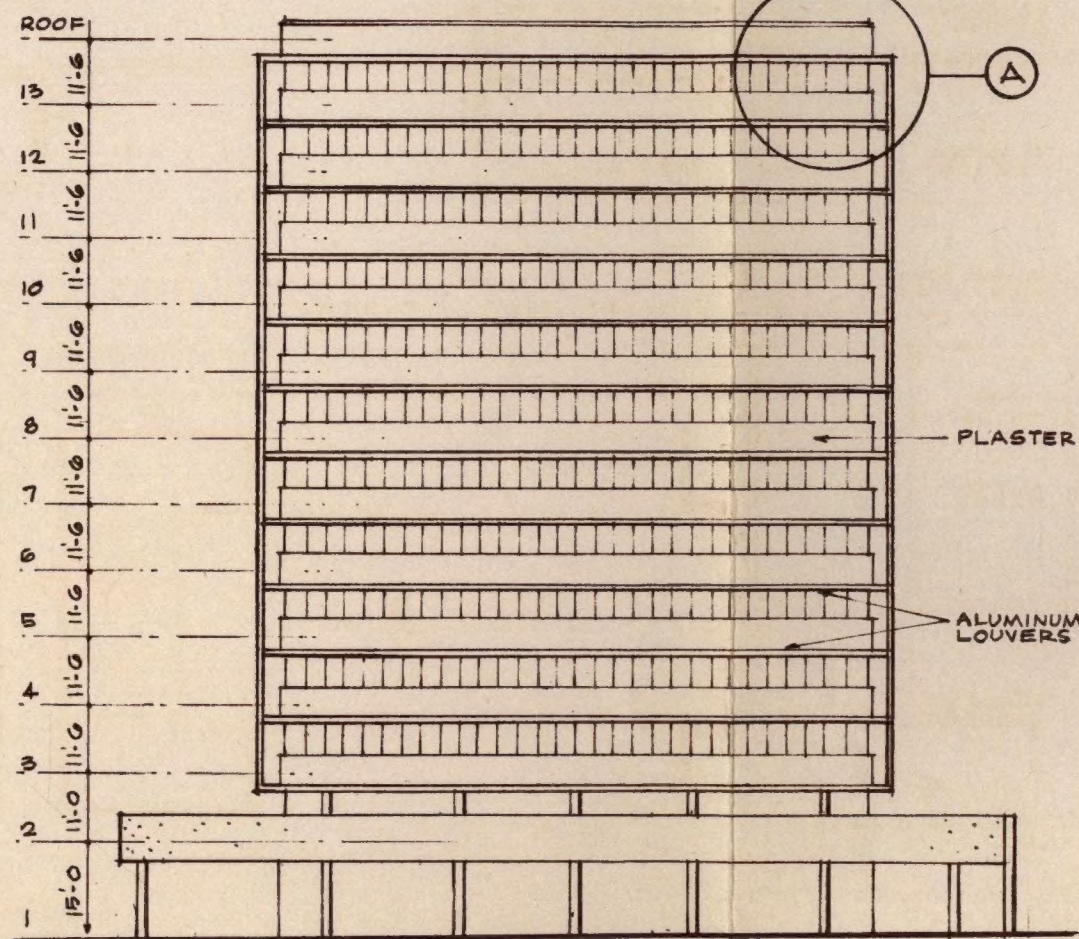


4 WF OUTRIGGER

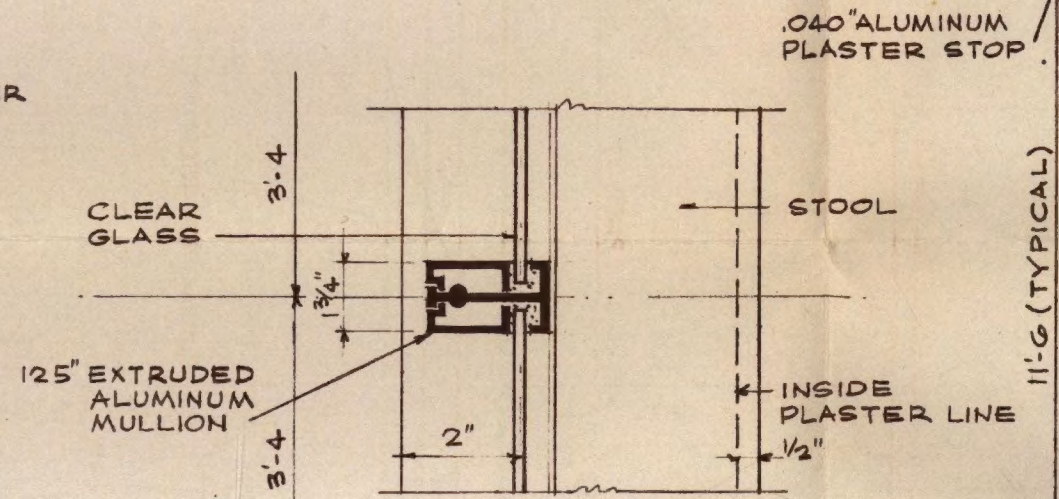
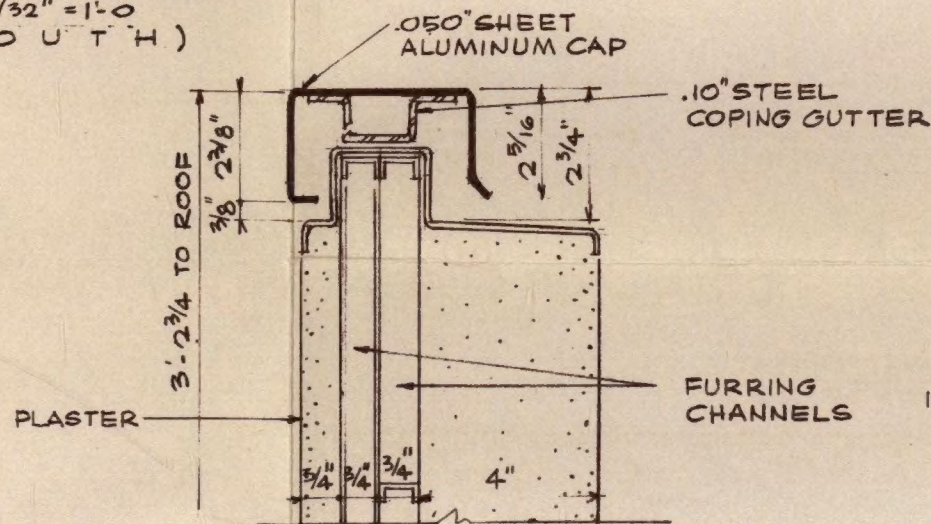
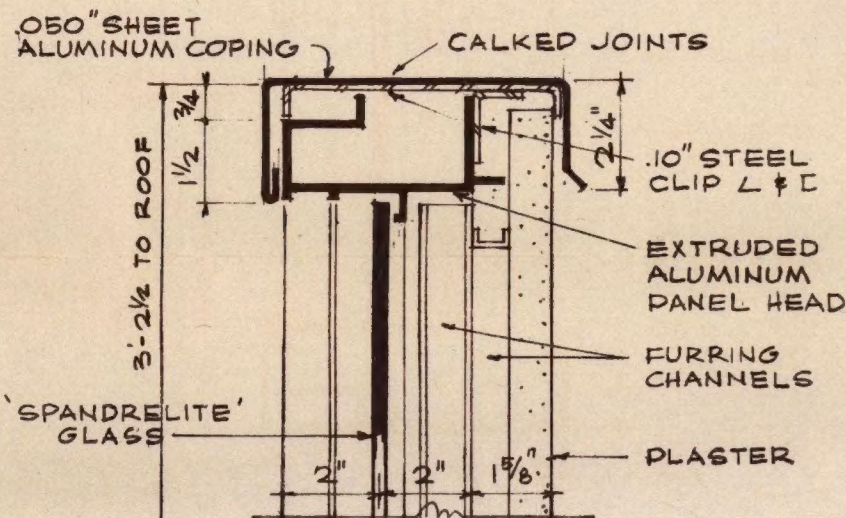
OUTRIGGER TYPE 'N' 8'-5 3/8" ± OVERALL LENGTH

OUTRIGGER TYPE 'S' 10'-1 3/8" ± OVERALL LENGTH

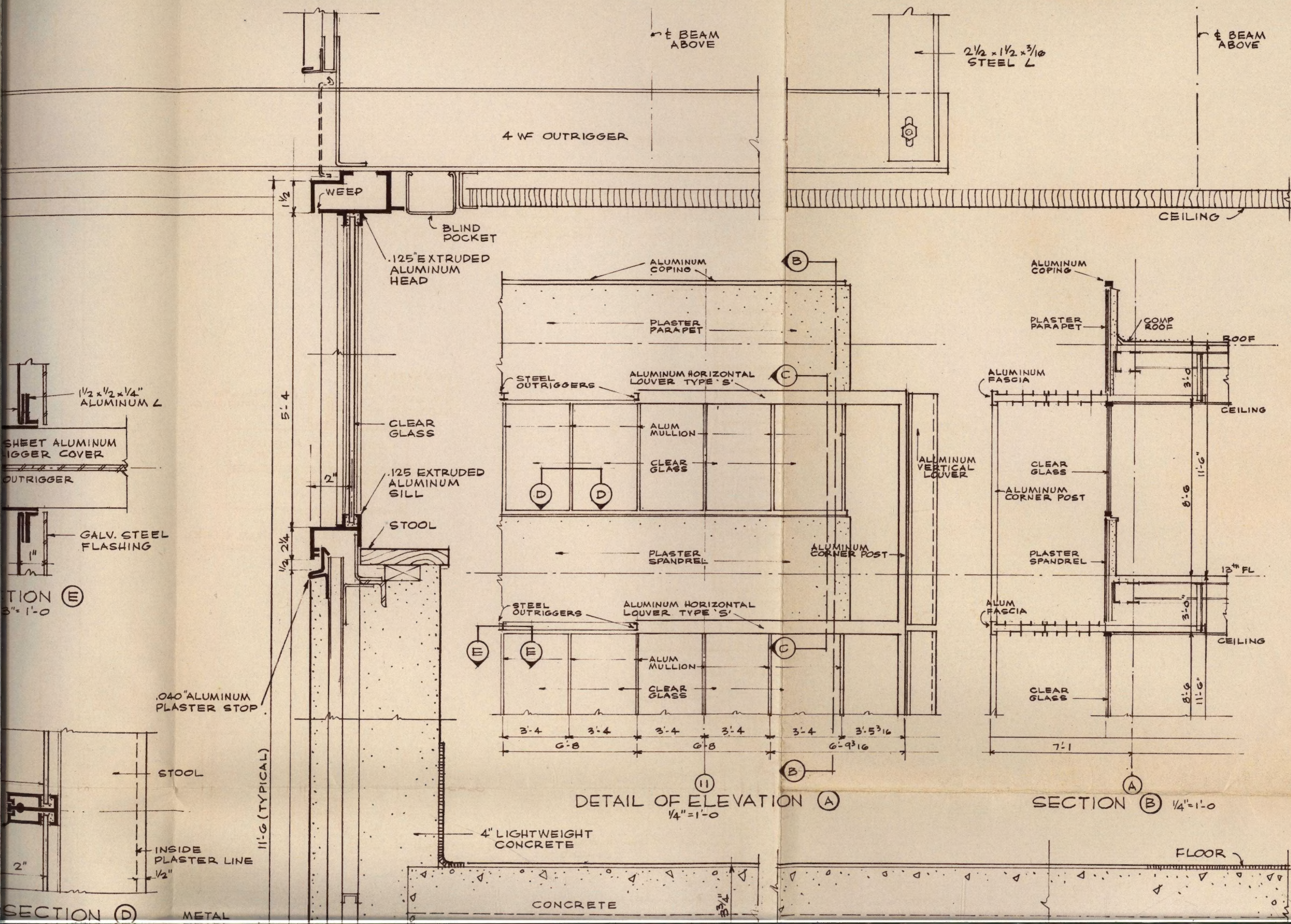
SECTION (C) STEEL OUTRIGGER-TYPES 'S' & 'N'



SECTION (E)  
3" = 1'-0"



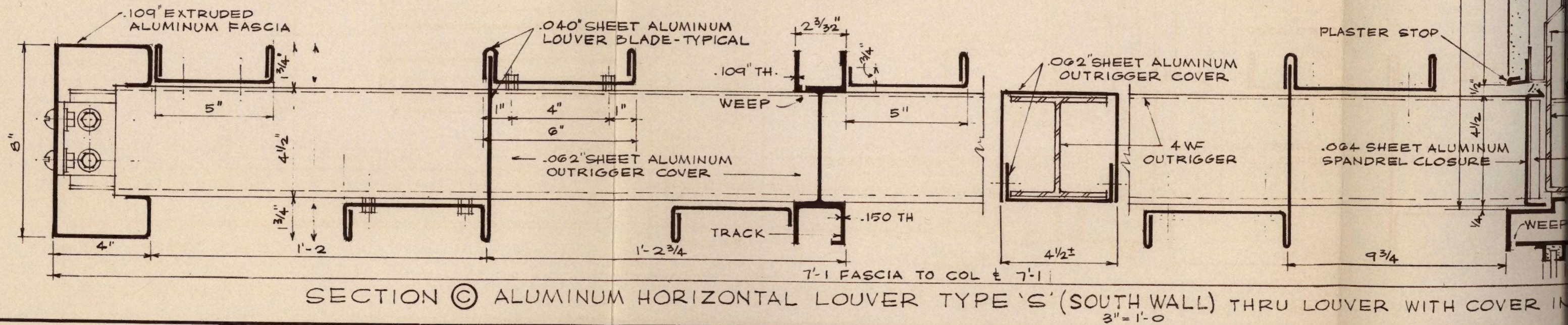
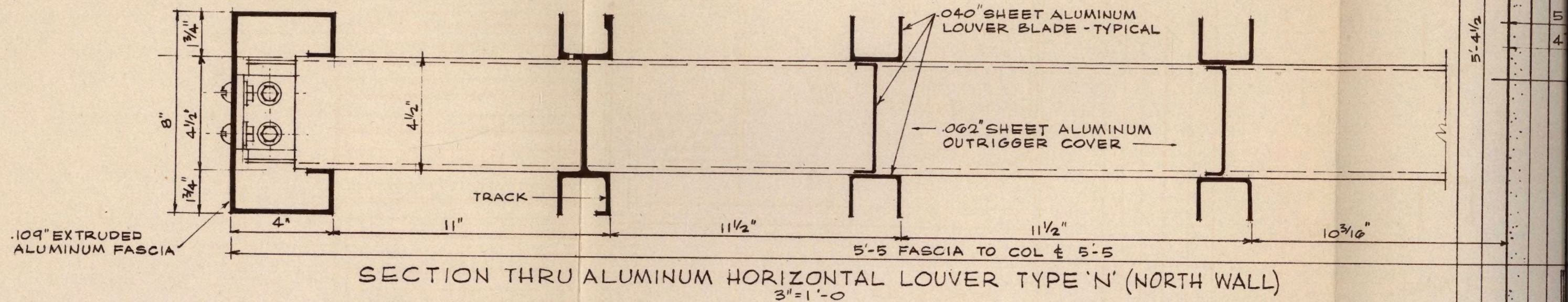
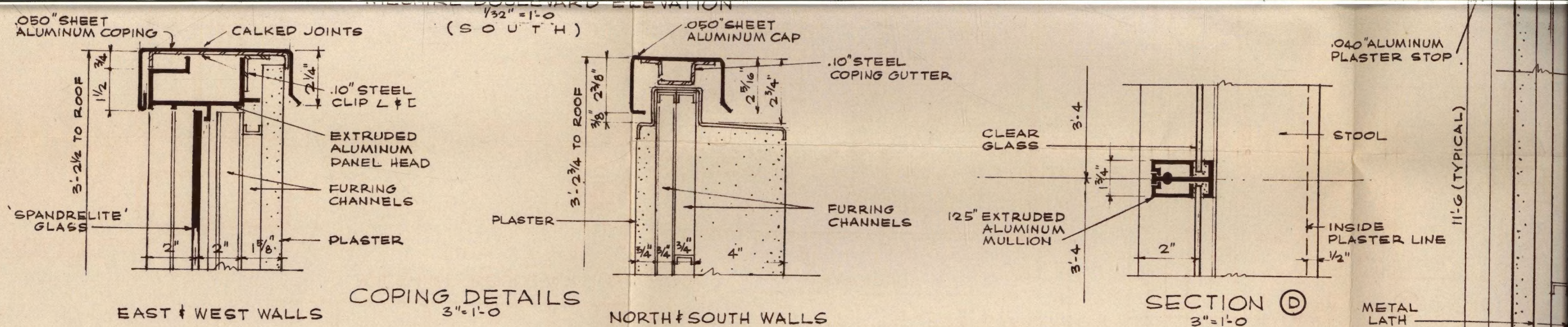












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